

퀴즈 #2

2020.09.29.

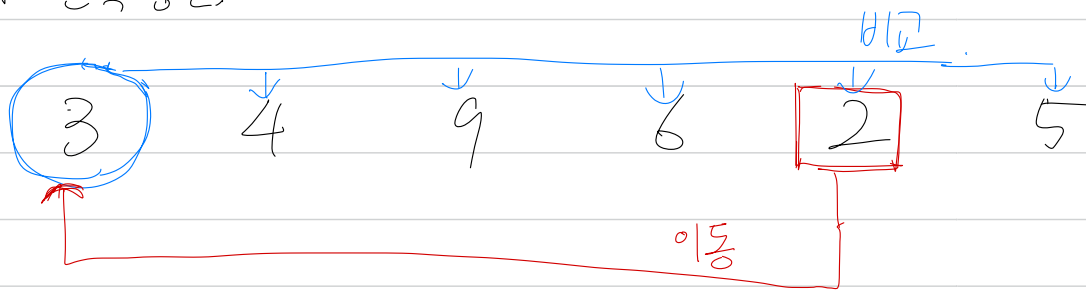
20164091 송희령

문제:

다음 수들은 오름차순으로 정렬하고자 한다. (3, 4, 9, 6, 2, 5)

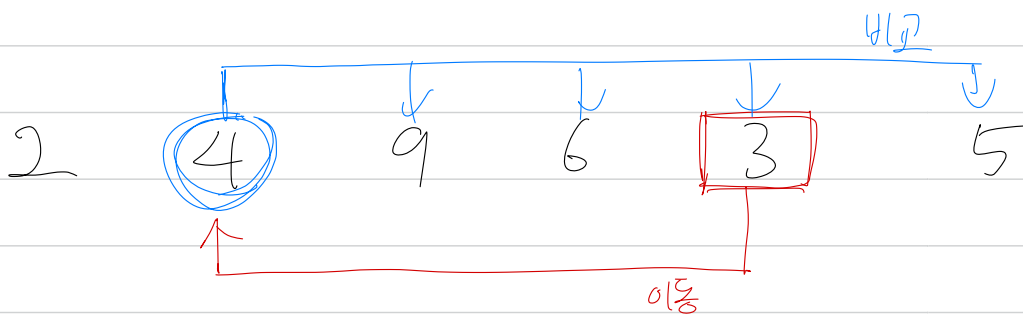
다음 각 정렬 방법을 적용하였을 때, 비교 횟수와 이동 횟수를 구하여라.

A. 선택정렬



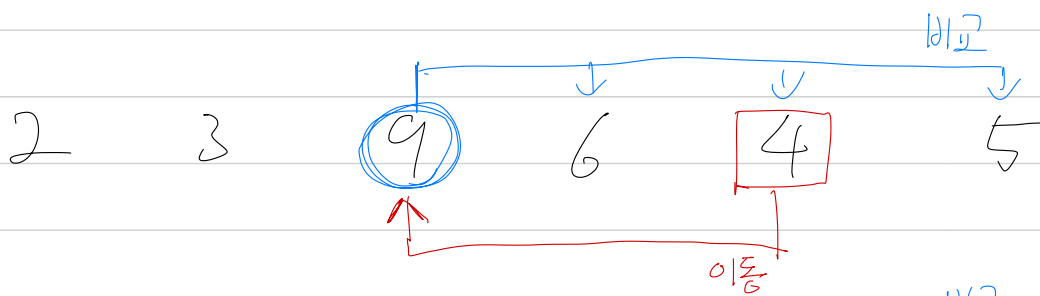
비교 : 5회

이동 : 3회 (+tmp 이동 포함)



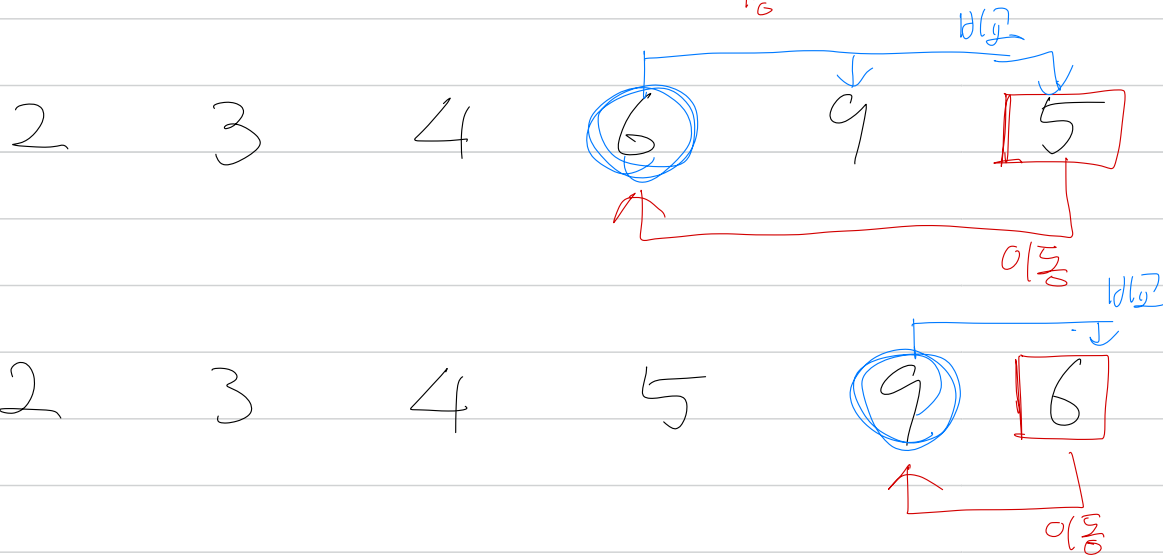
비교 : 4회

이동 : 3회



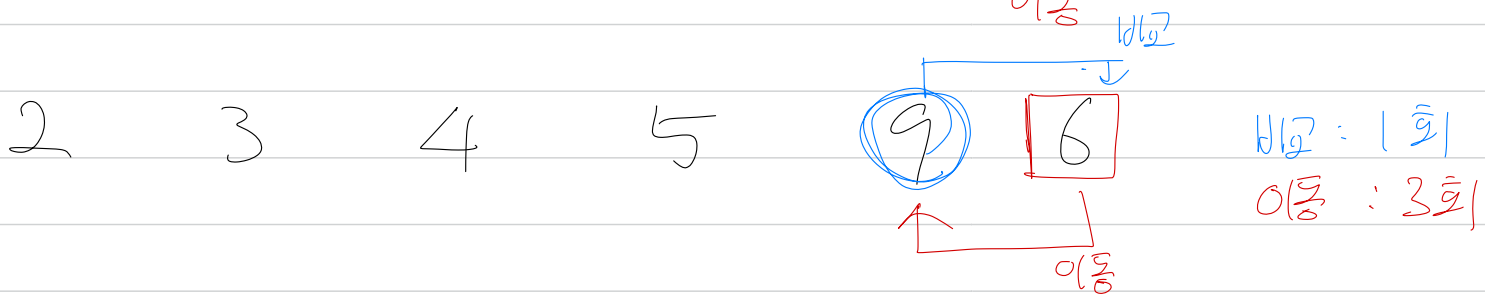
비교 : 3회

이동 : 3회



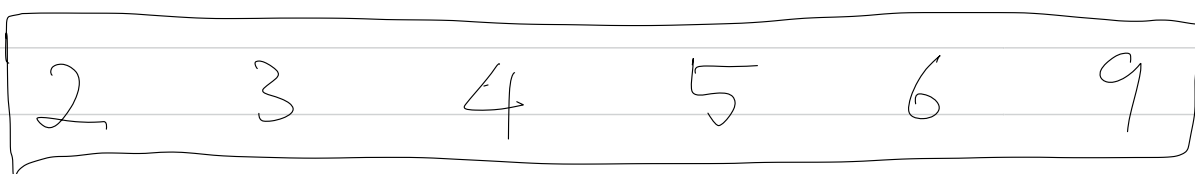
비교 : 2회

이동 : 3회



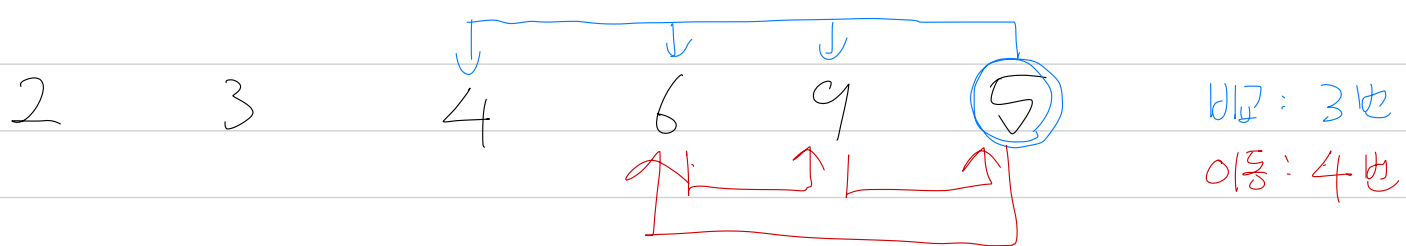
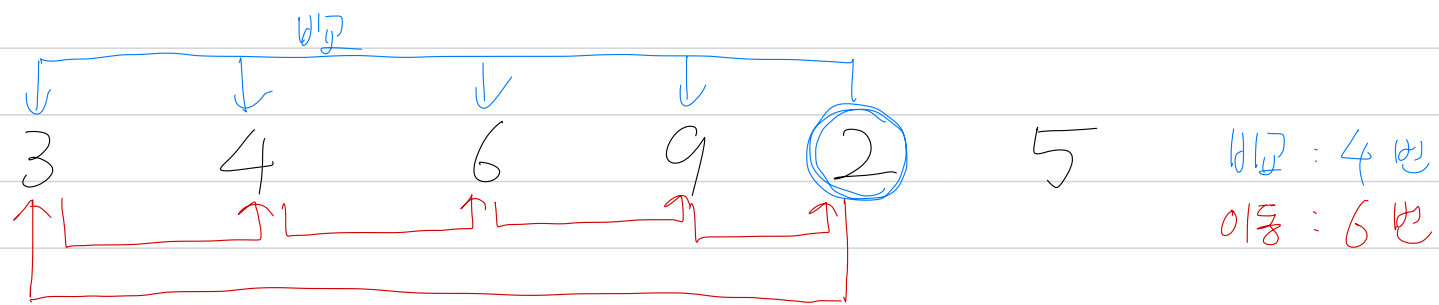
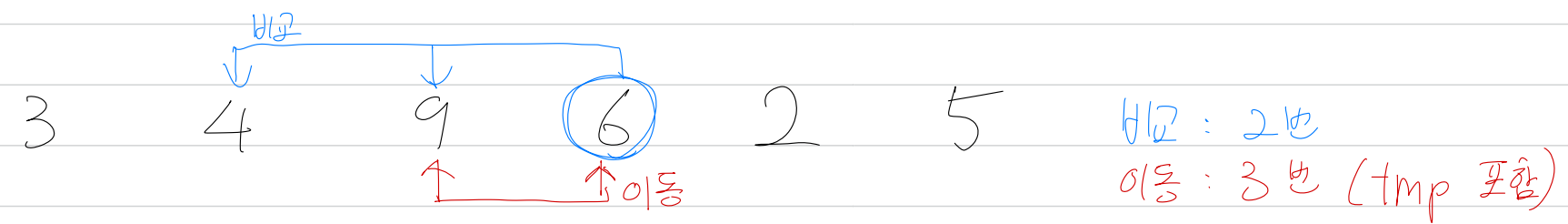
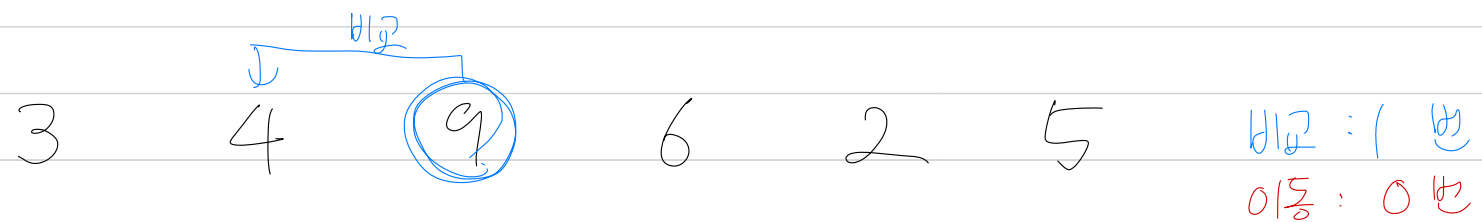
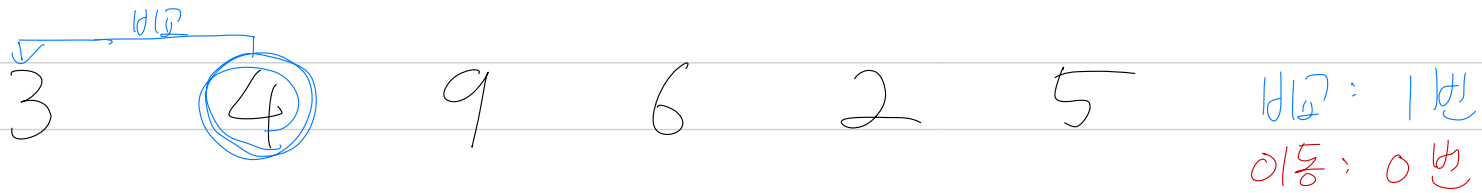
비교 : 1회

이동 : 3회



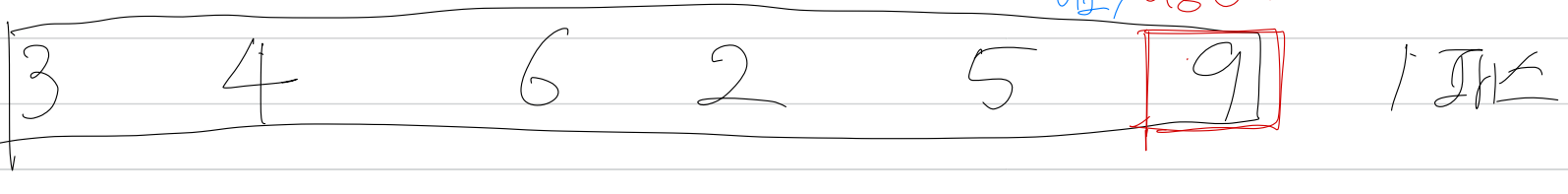
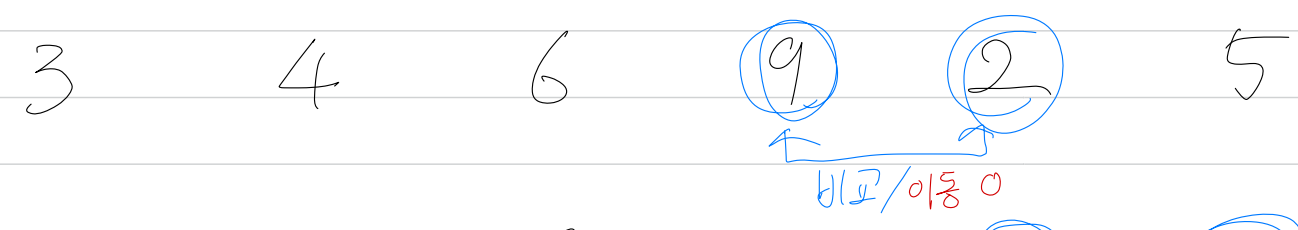
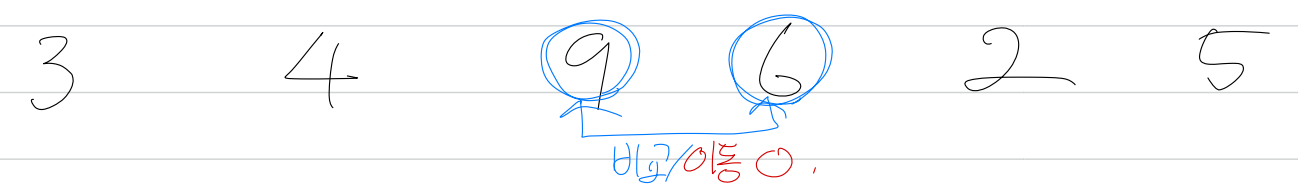
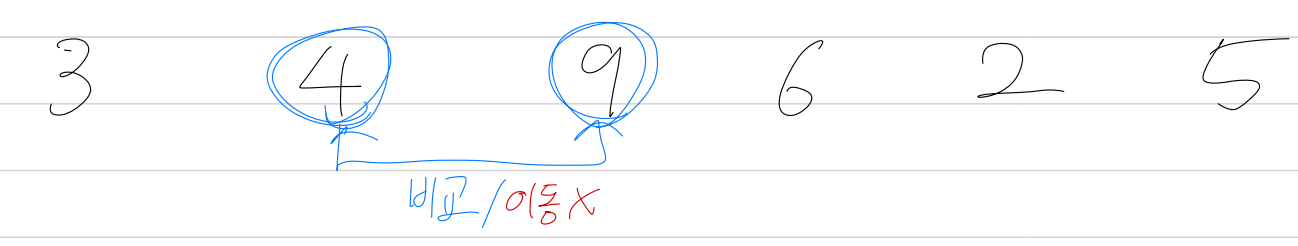
정렬 총 비교 : 15회
총 이동 : 15회

B. 삼일 정령

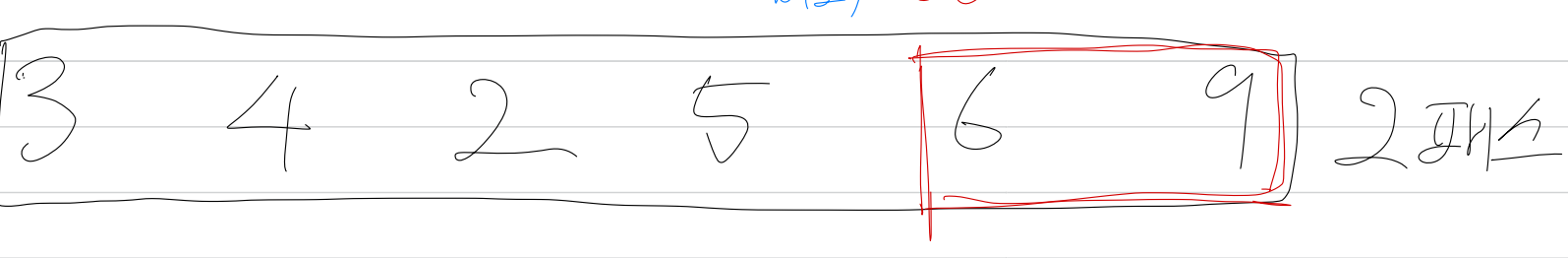
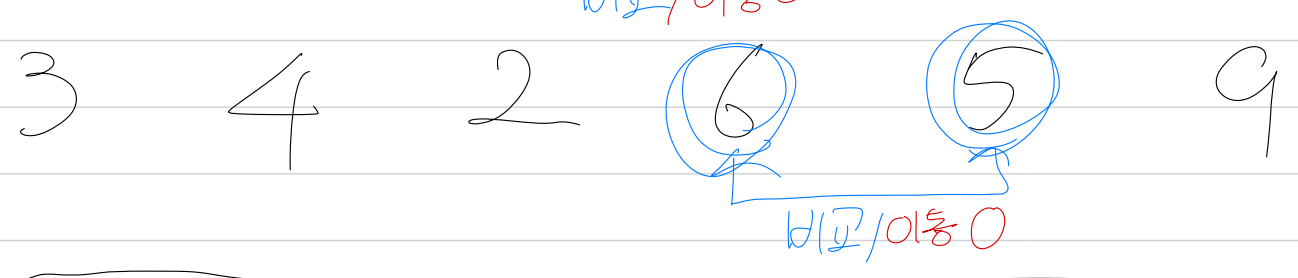
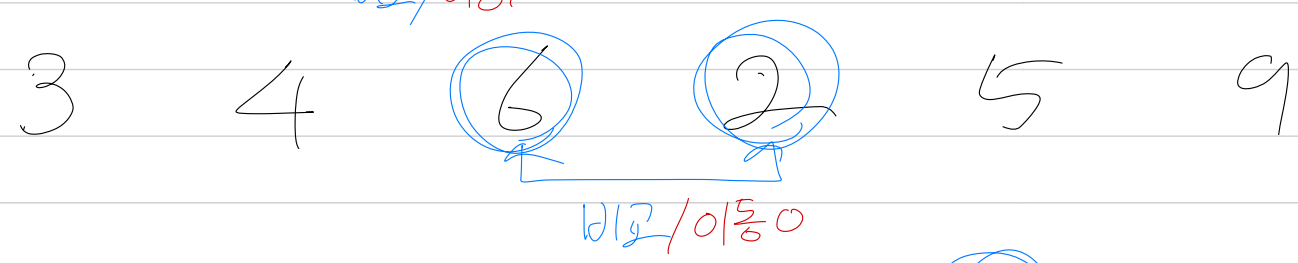
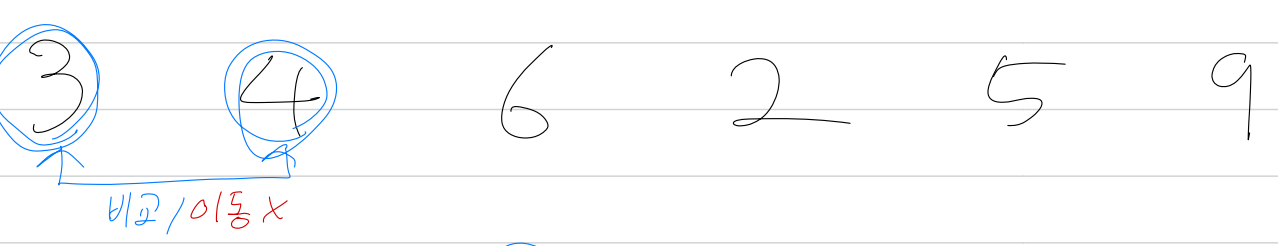


정렬 총 비교: 11 회
 총 이동: 13 회

C. 버블 정렬



비교: 5회
이동: 9회
(tmp 포함)



비교: 4회
이동: 6회

3 4 2 5 6 9
비교/이동 X

3 4 2 5 6 9
비교/이동 0

3 2 4 5 6 9
비교/이동 X

3 2 4 5 6 9 3패스 비교: 3회
이동: 3회

3 2 4 5 6 9
비교/이동 0

2 3 4 5 6 9
비교/이동 X

2 3 4 5 6 9 4패스 비교: 2회
이동: 3회

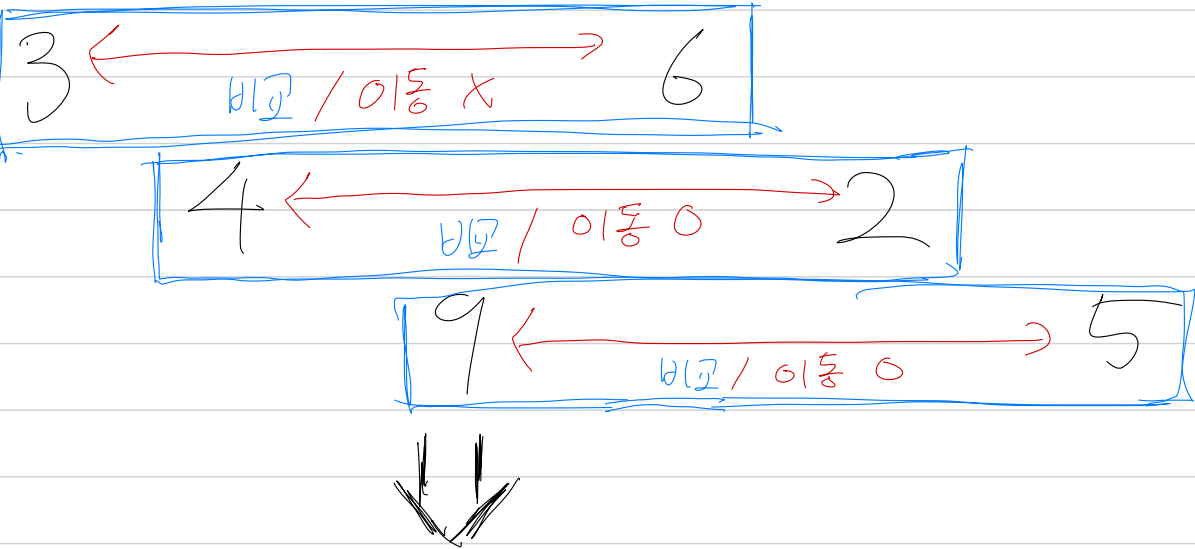
2 3 4 5 6 9
비교/이동 X

2 3 4 5 6 9 5패스 비교: 1회
이동: 0회

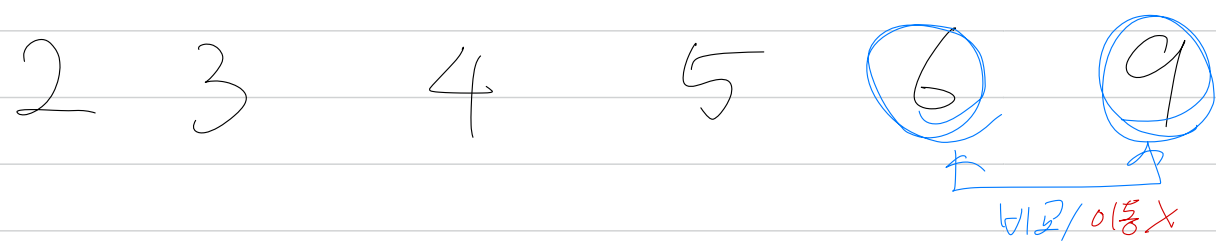
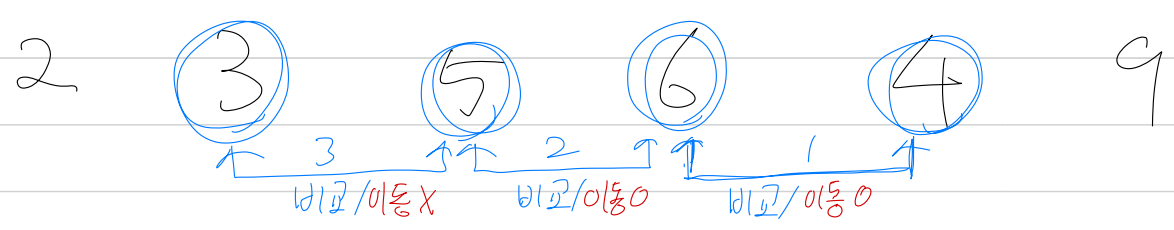
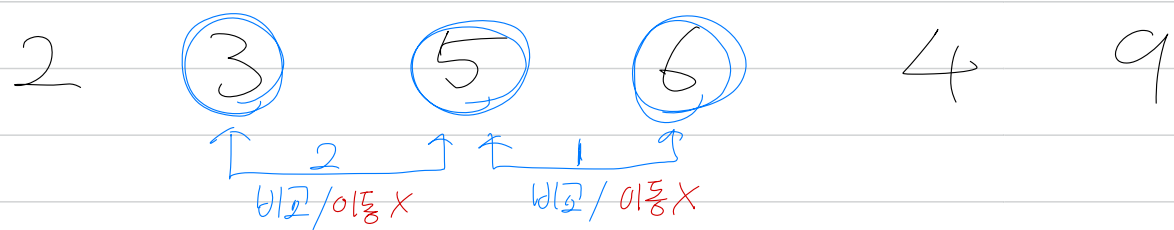
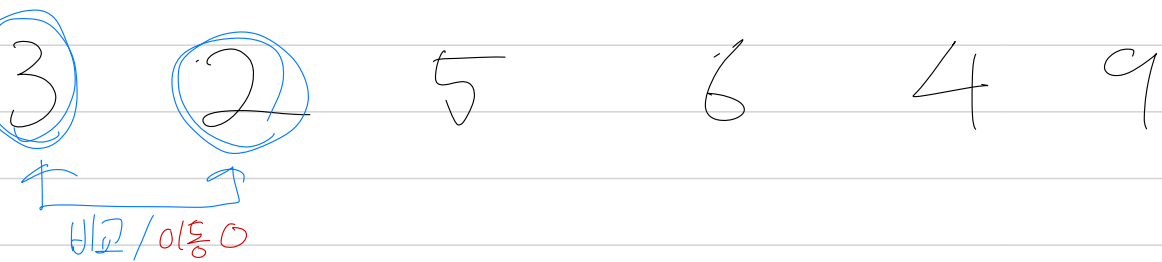
정렬 총 비교: 15회
총 이동: 2회

D. 수열 정렬 (Gap의 크기는 3부터 시작)

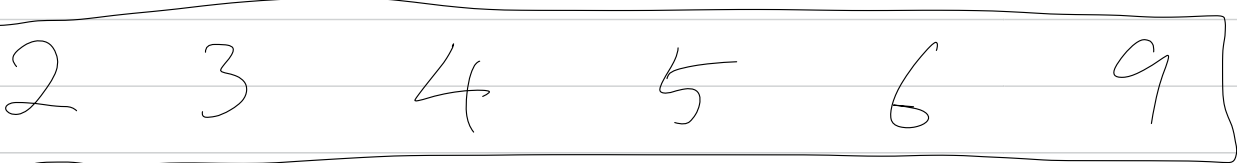
3 4 9 6 2 5



Gap = 3 비교 = 3회
이동 = 6회
(tmp 포함)



Gap = 1 비교 = 7회
이동 = 7회



정렬 횟수 비교 : 10회
이동 : 13회